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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,531	04/07/2004	Dean W. Rivest	OME-0017	8323
7590	03/10/2005			
CANTOR COLBURN LLP 55 Griffin Road South Bloomfield, CT 06002			EXAMINER HOOK, JAMES F	
			ART UNIT 3754	PAPER NUMBER

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/820,531

Applicant(s)

RIVEST, DEAN W.

Examiner

James F. Hook

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3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10-4-04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malcarne, Jr. in view of Noone (184). The patent to Malcarne, Jr. discloses the recited tubing assembly comprising a conductive metal corrugated tubing 12 including peaks and valleys, with a polymer jacket 22 disposed along the length of the corrugated tubing, the figures show annular corrugations, however it is considered an obvious choice of mechanical expedients to use helical corrugations as is old and well known in the art to be interchangeable with annular corrugations as such is an obvious choice of mechanical expedients, the jacket is a thermoplastic polymer including polyethylene, the thermoplastic polymer used in Malcarne, Jr. is considered to inherently have the same type of tensile strength, flexural modulus, and elongation in the absence of any suggestion of additives to achieve these values, the jacket fills the valleys and substantially covers the peaks, a metal coupling is provided 24, connected to both the corrugated metal tubing and the jacket which inherently would provide a conductive path. The patent to Malcarne, Jr. discloses all of the recited structure with the exception of providing material to the

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polymer jacket to give it conductive properties and having specific resistivity. The patent to Noone discloses the recited tubing assembly comprising an inner conductive layer 14 which can be convoluted or corrugated to have peaks and valleys, an outer layer 16 made of a conductive polymer jacket disposed along a length of the corrugated tubing layer 34, the corrugations are annular, the jacket is a thermoplastic polymer, and a fitting inherently can be provided on the ends in order to connect such tubing to fuel components to allow such to be used as a fuel line, where additives such as carbon black can be added to polymer jacket layers formed of various materials to make them conductive to provide a conductive path for built up charges. It would have been obvious to one skilled in the art to modify the polymer jacket of Malcarne, Jr. by providing an additive to make the layer conductive to prevent charge build up in the hose as suggested by Noone where such would prevent explosions and make the tube of Malcarne, Jr. safer. With respect to the specific resistivity such is considered to be an obvious choice of mechanical expedients where one skilled in the art would only require routine experimentation to arrive at optimum working values as such is merely a choice of mechanical expedients.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malcarne, Jr. in view of Noone (184) as applied to claims 1-4 and 6-13 above, and further in view of Ostrander. The patent to Malcarne, Jr. discloses all of the recited structure with the exception of forming the outer layer of polyether and polyurethane. The patent to Ostrander discloses that it is old and well known to form corrugated pipes with inner and outer layers using various types of

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materials which can be provided with conductive material such as polyether and polyurethane mixes. It would have been obvious to one skilled in the art to modify the outer layer of Malcarne, Jr. to be formed of polyether and polyurethane mixes as such is a known equivalent material used to form layers of a conductive hose as suggested by Ostrander where such material can be chosen to meet environmental needs of the user to allow the hose to perform better and save money due to lengthened life.

Response to Arguments

Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Mildner disclosing a state of the art multilayer and corrugated tubing of metal.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory

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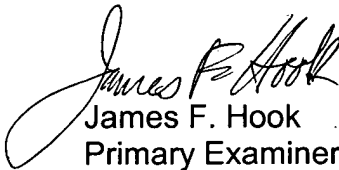
action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (571) 272-4906. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James F. Hook
Primary Examiner
Art Unit 3754

JFH